In the claims:

Please cancel pending claims 72-94, without prejudice, and replace with new claims 95-125 as follows.

95. A recombinant cell, comprising an isolated nucleic acid molecule responsible for converting a source compound to a target compound and one or more isolated genes responsible for converting said target compound to provide a detectable signal.

96. The recombinant cell of claim 95, wherein said detectable signal is selected from the group consisting of growth, fluorescence, luminescence, and color.

97. The recombinant cell of claim 95, wherein said detectable signal is growth.

98. The recombinant cell of claim 95, wherein said target compound is metabolized to an element selected from the group consisting of carbon, phosphorous, nitrogen, and sulfur.

99. The recombinant cell of claim 95, wherein said target compound is selected from the group consisting of ascorbate and 2-Keto-L-Gulonate.

100. The recombinant cell of claim 95, wherein said cell is a bacterial cell.

101. The recombinant cell of claim 95, wherein said bacterial cell is *Klebsiella oxytoca*.

102. The recombinant cell of claim 95, wherein said one or more genes are under the control of an inducible promoter.

103. The recombinant cell of claim 102, wherein said inducible promoter is induced by an inducer distinct from said target compound.

104. The cell of claim 102, wherein the detectable signal is produced in the presence of the source compound and an inducer of said promoter, but not in the presence of the source compound and absence of said inducer.

105. The recombinant cell of claim 102, wherein said inducible promoter comprises the *trp-lac* hybrid promoter.

106. A method for determining the presence, absence, or amount of a target compound in a recombinant cell, comprising:

(a) providing a recombinant cell, wherein said cell expresses an isolated nucleic acid molecule responsible for converting a source compound to a target compound and one or more genes responsible for converting said target compound to provide a detectable signal, and

(b) monitoring said detectable signal,

wherein the presence, absence, or amount of said detectable signal indicates the presence, absence, or amount of said target compound.

107. The method of claim 106, wherein said detectable signal is selected from the group consisting of growth, fluorescence, luminescence, and color.

108. The method of claim 106, wherein said detectable signal is growth.

109. The method of claim 106, wherein said target compound is metabolized to an element selected from the group consisting of carbon, phosphorous, nitrogen, and sulfur.

110. The method of claim 106, wherein said target compound is selected from the group consisting of ascorbate and 2-Keto-L-Gulonate.

111. The method of claim 106, wherein said cell is a bacterial cell.

112. The method of claim 106, wherein said bacterial cell is *Klebsiella oxytoca*.

113. The method of claim 106, wherein said one or more genes are isolated.

114. The method of claim 106, wherein said one or more genes are under the control of an inducible promoter.

115. The method of claim 114, wherein said inducible promoter is induced by an inducer distinct from said target compound.

116. The method of claim 114, wherein the detectable signal is produced in the presence of the source compound and an inducer of said promoter, but not in the presence of the source compound and absence of said inducer.

117. The method of claim 114, wherein said inducible promoter comprises the *trp-lac* hybrid promoter.

118. A recombinant cell, comprising a nucleic acid molecule comprising a YiaJ responsive promoter transcriptionally linked to a reporter gene, wherein said cell expresses YiaJ.

119. The recombinant cell of claim 118, wherein said reporter gene produces a detectable signal selected from the group consisting of growth, fluorescence, luminescence, and color.

120. A method for detecting the presence, absence, or amount of ascorbate in a sample, comprising:

(a) providing a recombinant cell comprising a nucleic acid molecule comprising a YiaJ responsive promoter transcriptionally linked to a reporter gene, wherein said cell expresses YiaJ;

(b) contacting said cell with said sample; and

(c) monitoring a detectable signal produced from said reporter gene,

wherein the amount of said detectable signal indicates the presence, absence, or amount of ascorbate in said sample.

121. The method of claim 120, wherein said detectable signal is selected from the group consisting of growth, fluorescence, luminescence, and color.

122. The method of claim 120, wherein said cell is a bacterial cell.

123. The method of claim 120, wherein said YiaJ responsive promoter is from *Klebsiella oxytoca*.

124. The method of claim 120, wherein said YiaJ responsive promoter is derived from SEQ ID NO:19.

125. An isolated nucleic acid molecule, comprising a YiaJ responsive promoter transcriptionally linked to a reporter gene.

REMARKS

Claims 72-94 are pending and presently under examination. Applicants have canceled claims 72-94 without prejudice and replaced these claims with new claims 95-125. Following entry of the above amendments, claims 95-125 will be pending.